

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

PUBLICATION NUMBER : 04027139  
PUBLICATION DATE : 30-01-92

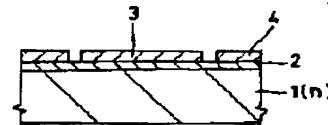
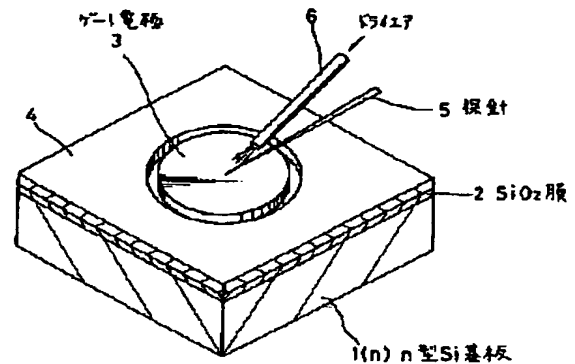
APPLICATION DATE : 22-05-90  
APPLICATION NUMBER : 02131869

APPLICANT : SONY CORP;

INVENTOR : KISHIMOTO KIYOSHI;

INT.CL. : H01L 21/66

TITLE : C-V MEASURING METHOD



ABSTRACT : PURPOSE: To make it possible to carry out C-V measurement under a more actual condition to a device by drying up the peripheral part of an electrode of a semiconductor device where the electrode is formed on a semiconductor substrate by way of an insulation film and performing the C-V measurement simultaneously or after the drying is over.

CONSTITUTION: A probe is applied to a gate electrode 3 of a MOS capacitor, for example so as to carry out C-V measurement. Or under the measurement, dry air is blasted at the periphery of the gate electrode 3 from the tip of a pipe 6 so as to dry up the peripheral part of the gate electrode 3 where the dry air should preferably hot air, because the hot air is capable of drying up the peripheral part of the gate electrode 3 and effectively eliminating the moisture produced on the surface of an SiO<sub>2</sub> film 2 on the peripheral part. The application of dry air at an ambient temperature is acceptable. This construction makes it possible to inhibit an extension of a depletion layer formed on a semiconductor substrate located below the electrode 3 in the lateral direction of a void layer without the application to a guard ring 4, and moreover it is possible to carry out C-V measurement under a more actual condition to the device.

COPYRIGHT: (C)1992,JPO&Japio